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Observance: A Record of Experiments

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Printmaking

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Abstract

Thesis writing on the work of Olivia Mosley, Bachelor of Fine Arts candidate in Printmaking at Washington University in St. Louis. Engaging with a diverse history of photography and observation through the theoretical writings of Barthes, Berger, Didi-Huberman and others, Mosley conducts a series of visual experiments as part of her art practice in an attempt to expand her visual knowledge. Exploring the concepts of visualization, observation and the role technology plays in both of the aforementioned activities, Mosley's work is discussed alongside the visual contributions of scientists, artists and hobbyists experimenting with the photographic medium throughout history, including, Wilhelm Kühne, Nicéphore Niépce, Wilhelm Röntgen and others as a way of engaging with the possibilities of the medium.

Throughout the late nineteenth and early twentieth century, it was a commonly held notion that the eye captured the image last seen before death, permanently affixing the picture to the retina.

Fig. 1: Wilhelm Kühne, *Optogram from a rabbit's eye,* 1878.

While fictionalized accounts of this theory served as conceptual fodder for detective stories and crime novels, scientists concurrently were seeking a method to actually retrieve images from the eye. In 1876, scientist Francis Boll discovered rhodopsin, or visual purple, a light-sensitive pigment in the retina (Evans). Two years later, Wilhelm Kühne's experiments revealed that images on the retina could indeed be captured, fixing the rhodopsin, photosensitive component of the eye of a rabbit, essentially using the animal's eye as a camera to crate a photographic negative (Fig. 1).

Since the advent of photography, scientists, artists, and hobbyists have been seeking to expand our visual knowledge through experiments with the limits of the medium. The discovery of photography has defined our reality and shaped our perceptions of the world around us, while simultaneously suggesting the possibility that further knowledge can still be sought. My work engages with this history of observation, by creating visual experiments that seek to expand my own visual knowledge of the world around me.

Visualization

Visualization, by definition is the act of *making* something visible. Another definition states that visualization is the act of recalling or forming mental images or pictures, while yet another cites

that visualization is *to make perceptible* to the mind or imagination. All of these definitions of visualization conjure ideas of knowledge, awareness, perception and most importantly creation. These ideas are the conceptual thrust of the development of my work, as well as the development of the photographic medium itself.

Grant Romer, speaking on the history and advent of photography has often been quoted as saying, "We have become dull to the miracle of photography." Indeed, although we are overwhelmed by visual media daily, constantly bombarded with photographic images, we forget how young our visual knowledge actually is. Nicéphore Niépce first fixed a photograph under two-hundred years ago, securing the future possibility of capturing the visual world (Fig. 2). The concept of visualization is inherent to the struggle of photography, and points to our limited visual knowledge as a source of exploration.

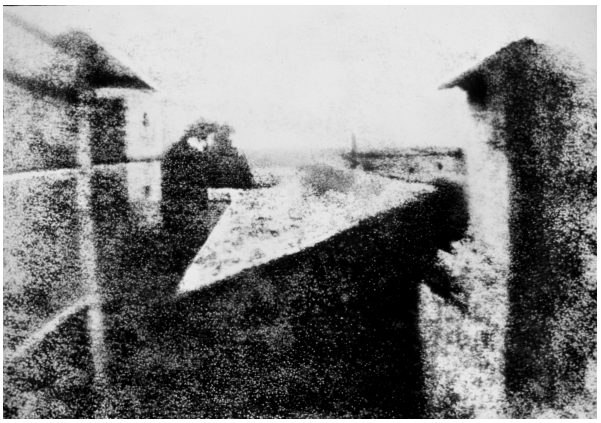

Fig. 2: Nicéphore Niépce*, View from the Window at Le Gras,* 1826

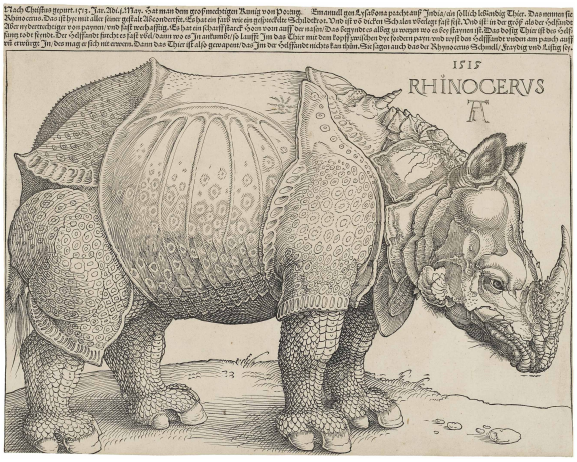

Fig. 3: Albrecht Dürer. *Rhinoceros*, 1515.

Albrecht Dürer's woodcut of a Rhinoceros (Fig. 3) is a prominent example of visual knowledge before photography. Created in 1515, Dürer was unable to view the non-native animal in person, so he crafted its likeness based on a pre-existing drawing and a written description (Dackerman). Although thoughtful and meticulous in his carefully rendered lines, the fleshy folds of skin of the Indian rhinoceros are

depicted as a hard, armored body, paneled like the shell of turtle, while reptilian scales cover the creature's legs. Seemingly dismissing any suggestion of inaccuracies in its depiction outright, in the inscription Dürer claims the likeness of the animal was recorded "from life". To modern viewers, this seems like a misleading or even dishonest claim, but curator and author Susan Dackerman explains the difference between modern and sixteenth century interpretations of visual knowledge,

> "In the sixteenth century, to say that it was made from life meant that it could also have been made from a drawing someone else made from life. But that claim, of that being a first-hand representation, an eye-witness account, was very important in terms of the legitimacy of knowledge gathered during the time."

Despite its inaccuracies, Western viewers perceived Dürer's interpretation of a Rhinoceros as an accurate representation of the elusive animal, and the illustration maintained its visual credibility for several centuries until more accurate renderings emerged in time.

The eventual introduction of photography changed visual knowledge and representation forever, allowing practitioners to capture the visual world: accurately, and without the distortion of the artists' hand. Within the medium of photography, light acts as the transfer media, therefore it is always a record of a presence that once existed. Because of this close association with a latent physical presence, the photograph quickly found itself as an extension of our individual memories, burdened with the futile attempt at preserving life through capturing and holding on to the absent. In *Camera Lucida: Reflections on Photography*, French philosopher Roland Barthes describes the presence, and ultimate absence, inherent in the photographic image, "The photograph is literally an emanation of the referent. From a real body, which was there, proceed radiations which ultimately touch me, who am here; the duration of the transmission is

insignificant; the photograph of the missing being, as Sontag says, will touch me like the delayed rays of a star." (Barthes, 92) Here, Barthes, with Sontag's help, has also described the connection between the photograph and the physical presence by comparing the presence inherent within the image as almost a kind of *touch* between the sitter and the viewer.

Because of photography's strong association with the spirit, it wasn't long after the invention of photography that certain spiritually-minded people began entertaining the possibility of capturing supernatural presences through the new medium. The history of *spirit photography* presents a curious mingling of science and superstition: both sincere attempts at discovery and outright frauds define the practice. William H. Mumler, an amateur photographer, ostensibly created the genre after taking a self-portrait that supposedly manifested the apparition of his dead cousin. After this seemingly miraculous occurrence, Mumler quit his job as an engraver to pursue spirit photography full-time. The devastating causalities of the Civil War made Mumler's career choice quite lucrative, as many sought out to reconnect with loved ones lost during the war through Mumer's images (Chéroux, 20). The novelty of Mumler's practice even attracted the attention of Mary Todd Lincoln, who sat for a portrait for Mumler. One of his most famous images, the photograph seems to depict the spirit of the former First Lady's late husband watching over her (Fig. 4).

Fig. 4: William H. Mumler, *Spirit photograph of Mary Todd Lincoln with the ghost of President Lincoln,* 1869.

Other notable examples of spirit photography continued through the early twentieth century, with William Hope continuing the legacy Mumler established, although Hope's images

were arguably aesthetically and conceptually more adventurous than his predecessor. In 1917, cousins Elsie Wright and Frances Griffiths, who were respectively sixteen and nine at the time, created the famous Cottingley Fairies photographs. Author Sir Arthur Conan Doyle passionately embraced the images, believing the photographs to be proof of psychic activity. After Doyle's death, his spirit began appearing in several of Hope's photographs, including one that depicts a written message from the deceased author, "Difficult to manifest present conditions not suitab[le]." (Chéroux, 90)

Although the aforementioned examples are easily explained through dark room manipulation and double exposures, other pieces present a more elusive concept of spiritual presence through photography. During the turn of the century, several figures within the realm of science and spiritualism attempted to create records of imperceptible emanations of the human body, attempting to visualize a human spirit or life-force (Chéroux, 118). Adrien Majewski created photographs of "effluvia' meaning an invisible exhalation or emission, by essentially having a subject place their hand on a sensitized plate. The resulting images produce a ghostly outline of a human hand, while the chemical reactions between the sensitized plate and the human presence create unexpected results. While Russian scientist Jacob von Narkiewicz-Jodko created similar images, he contributed the use of electrical currents on his subjects to manifest another trace of intangible presence on the sensitized plate (Fig. 5).

Fig. 5: Jakob von Narkievicz-Jodko, *Effluvia from an Electrified Hand Resting on a Photographic Plate,* 1896.

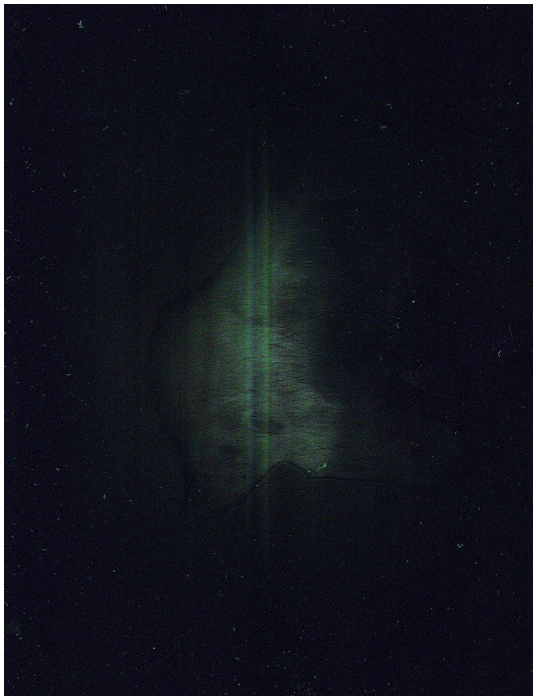

Fig. 6: Olivia Mosley, *Breath on Glass #2*, 2014.

Attempting to engage with this curious history, *Breath on Glass* (Fig. 6) introduces the concept of visualization within my body of work. Chance plays an important role in manifesting this image, as the intangible breath is resistant to being captured, but able to be coaxed into our perception through digital manipulation. Through adjustments in imaging, the digital scan reveals the latent image hidden in an initially white canvas: the formation of peculiar, unpredictable shapes formed through the act of breathing. By creating a record of a transitory matter, this work suggests the absent physical body, pointing to the breath as a simultaneously fragile, but essential, life source.

2

Observation

The act of looking is transformative in nature. Art Critic John Berger in *Ways of Seeing*, largely inspired by the theoretical works of Walter Benjamin, spoke about the self-awareness inherent in the act of looking, "Soon after we can see, we are aware that we can also be seen. The eye of the other combines with our own eye to make it fully credible that we are part of the visible world." (Berger, 9) Through Berger's reading of observation, and inherently perception as well, looking is transformative through realization, allowing us to acknowledge our existence as visual beings, both perceiving and perceivable. Observation transforms the subject being observed:

beyond simply acknowledging its existence the habit of observing bestows importance on the subject, recognizing the subject's desire to be seen.

A prominent example of the transformative nature of photography, and thus observation, can be found in the religious iconography of the Shroud of Turin. In 1898, Secondo Pia, an amateur photographer, discovered latent information that had been hidden from sight during the Shroud's existence when his photographic negative revealed the now infamous visual likeness of Christ imprinted in the cloth (Fig. 7). Writer and philosopher Georges Didi-Huberman describes the effect of this visual discovery in the context of the transformative nature of photography,

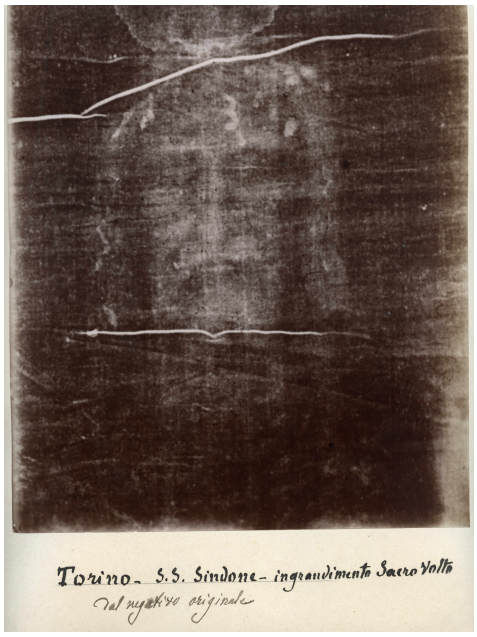

Fig. 7: Secondo Pia, *The Shroud of Turin,* 1898.

> "Let us recall that the historic impetus that rendered the shroud of Turin visible – or more precisely, figurative – is found in the history of photography. […] The photographic negative revealed what one had never hoped to see on the shroud itself. As the photographic "evidence" objectified an aspect of the shroud, it became proof of a miracle. Revealing information not immediately apparent to the naked eye."

Through the act of engaging with looking, with aid of the camera, Pia's photographic negative transformed the object, and its inherent significance, by revealing information unattainable

through unaided viewing, pointing to the camera as a source of expanding our visual knowledge.

Fig. 8: Olivia Mosley, *One Week of Looking Up #4*, 2014.

The photographer Elliot Erwitt said of his medium, "To me, photography is an art of observation." All photography is observational in nature, but the medium takes on particular significance when the camera's lens is focused solely on a particular viewpoint or subject. *One Week of Looking Up* (Fig. 8) attempts to engage with the less seen by pointing the lens of the camera upwards, capturing what is directly above my body at a given moment. The images are typically innocuous, visually unassuming collections of lighting fixtures, painfully unadorned ceilings, and occasionally majestic blue skies. Often, the act of directing the eye upwards reveals another eye looking back. Surveillance cameras and other means for observation suggest an absent party, one that is also engaged with the habit of looking, but hidden from sight.

3

Technology

Technology plays an important role in all of the aforementioned studies. Technology is a means for visualization: it aids the eye in looking and capturing the visual world around it. It observes without prejudice, recording all that is put before its eye. The Russian filmmaker Dziga Vertov personified the film camera in his short film work *Kino-Eye*, suggesting an autonomous, mechanical being that narrates its own existence:

> "I am an eye. A mechanical eye. I, the machine, show you a world the way only I can see it. I free myself for today and forever from human immobility. I'm in constant movement. I approach and pull away from objects. I creep under them. I move alongside a running horse's mouth. I fall and rise with the falling and rising bodies. This is I, the machine, maneuvering in the chaotic movements, recording one movement after another in the most complex combinations. Freed from the boundaries of time and space, I co-ordinate any and all points of the universe, wherever I want them to be. My way leads towards the creation of a fresh perception of the world. Thus I explain in a new way the world unknown to you."

Vertov suggests a being capable of sight beyond human perception, one that is unbiased, and constantly engaged with looking. Vertov's *Kino-eye*, although describing the cinematic eye, also serves as an accurate metaphor for cameras utilized in the act of surveillance, an activity that has grown concurrently with the proliferation of cameras in our society. The aforementioned security cameras are one such example of an eye constantly engaged with looking, other more insidious observers are far from human sight, including satellite cameras, which are constantly creating an expanding archive of imagery. *One Day of Viewing* (Fig. 9) engages with the archive of digital imagery created by the human viewer, by using my own records of technology-aided viewing for analysis.

Fig. 9: Olivia Mosley, *One Day of Viewing (installation view)*, 2014.

Downloaded images are simplified as

striations of color by extracting every unique color that constructs the image through pixelation in the JPEG format, which is most often utilized for web use. The striations representing each individual image are then stacked together, creating a timeline of viewing particular to one day. For installation, this image is digitally printed as a long, scroll-like piece that is partially hung on the wall, while the remaining length of the piece remains rolled on the floor, suggesting that I, as the viewer, am still actively engaged with looking.

4

Conclusions

In 1895, German physicist Wilhelm Conrad Röntgen contributed the x-ray to the electromagnetic spectrum, when he accidentally discovered the radiation wavelength when observing a fluorescent presence during another experiment involving the use of barium platinocyanide. An amateur photographer, Röntgen was able to recreate the phenomenon and photograph its effects. The resulting photograph shows the hand of Röntgen's wife rendered as a ghostly, skeletal presence (Fig. 10). Upon seeing the image Röntgen's wife was purported to claim that she had glimpsed her own death. Röntgen would name the radiation "X" for the mathematical placeholder for an unknown (Chéroux, 117-118).

Fig. 10: Wilhelm Rontgen, *First medical X-ray by Wilhelm Rontgen of his wife Anna Bertha Ludwig's hand*, 1895.

While the ability to see inside the human body was a monumental discovery for the progression of medicine, Corey Keller describes the effect this discovery had on the public, "To

the general public, these pictures were not medical diagnoses waiting to be made or medical data to be deciphered, but rather spectacular glimpses into realms normally opaque to human vision." (Keller, 132) Even after the miracle of photography, Röntgen's discovery proved there was more to be sought, pointing to a visual world that lay latent from our perceptions.

Henry David Thoreau, writing about the act of observation in his journal said, "Many an object is not seen, though it falls within the range of our visual ray, because it does not come within the range of our intellectual ray, i.e. we are not looking for it. So, in the largest sense, we find only the world we look for." Through the experiments in *Observance*, I engage with the history of photography and its curious innovations in an attempt to expand my visual knowledge and engage with my surroundings through observation. Aided by technology in the act of looking and recording my experiments, my work is informed by the developments of the photographic medium, and the spirit of discovery latent in the practice.

References

Barthes, Roland, and Geoff Dyer. *Camera Lucida: Reflections on Photography*. New York: Hill and Wang, 2010. Print.

Berger, John. *Ways of Seeing: Based on the BBC Television Series with John Berger*. London: British Broadcasting, 1977. Print.

Berger, John. *Ways of Seeing*. Prod. Mike Dibb. British Broadcasting Corporation (BBC). 8 Jan. 1972. Television.

Chéroux, Clément. *The Perfect Medium: Photography and the Occult*. New Haven, CT: Yale UP, 2005. Print.

Dackerman, Susan. "Object Discussion: Dürer's Rhinoceros." *Vimeo*. Harvard Art Museums, 21 Oct. 2011. Web. <http://vimeo.com/30743283>.

Dackerman, Susan. *Prints and the Pursuit of Knowledge in Early Modern Europe*. Cambridge, MA: Harvard Art Museums, 2011. Print.

Didi-Huberman, Georges, and Thomas Repensek. "The Index of the Absent Wound (Monograph on a Stain)." *October* 29 (1984): 63. Print.

Evans, A.B., 'Optograms and Fiction: Photo in a Dead Man's Eye', Science-Fiction Studies XX:3 341-61, 1993. Print.

Keller, Corey. *Brought to Light: Photography and the Invisible, 1840-1900*. San Francisco: San Francisco Museum of Modern Art, 2008. Print.

Romer, Grant B. ACP Lecture Series 2010. High Museum, Atlanta, GA. 20 Oct. 2010. Lecture.

Thoreau, Henry David., and Franklin B. Sanborn. *The Writings of Henry David Thoreau*. Boston: Houghton, Mifflin, 1906. Print.

Vertov, Dziga, and Annette Michelson. Kino-eye: The Writings of Dziga Vertov. Berkeley, Ca.: U of California, 1984. Print.

Images

1. Wilhelm Kühne, *Optogram from a rabbit's eye,* 1878.
2. Nicéphore Niépce*, View from the Window at Le Gras,* 1826
3. Albrecht Dürer. *Rhinoceros*, 1515.
4. William H. Mumler, *Spirit photograph of Mary Todd Lincoln with the ghost of President Lincoln,* 1869.
5. Jakob von Narkievicz-Jodko, *Effluvia from an Electrified Hand Resting on a Photographic Plate*, 1896.
6. Olivia Mosley*, Breath on Glass #2*, 2014.
7. Secondo Pia, *The Shroud of Turin*, 1898.
8. Olivia Mosley*, One Week of Looking Up #4*, 2014.
9. Olivia Mosley, *One Day of Viewing (installation view)*, 2014
10. Wilhelm Röntgen, *First medical X-ray by Wilhelm Röntgen of his wife Anna Bertha Ludwig's hand,* 1895.